

44. (New) The isolated nucleic acid molecule of claim 43, wherein the sequence is (a).

45. (New) The isolated nucleic acid molecule of claim 44, wherein the sequence is (b).

46. (New) The isolated nucleic acid molecule of claim 44, wherein the sequence is (c).

47. (New) The isolated nucleic acid molecule of claim 44, wherein the nucleic acid molecule comprises a molecule selected from the group consisting of DNA, cDNA, and RNA.

48. (New) A recombinant expression vector comprising DNA of claim 47.

49. (New) A host cell comprising the vector of claim 48, wherein the cell is selected from the group consisting of a procaryotic cell and a eucaryotic cell.

50. (New) The host cell of claim 49, wherein the cell expresses a polypeptide having a sequence selected from the group consisting of:

- (a) the amino acid sequence of SEQ ID NO: 1;
- (b) an amino acid sequence encoded by the nucleic acid sequence of SEQ ID NO: 2;
- (c) an amino acid sequence encoded by the nucleic acid sequence of SEQ ID NO: 3.

51. (New) The host cell of claim 50, wherein the sequence is (a).

52. (New) The host cell of claim 50, wherein the sequence is (b).

53. (New) The host cell of claim 50, wherein the sequence is (c).

54. (New) The vector of claim 48, wherein the vector is selected from the group consisting of a plasmid and a virus.

55. (New) The vector of claim 48, wherein the vector is a virus selected from the group consisting of simian virus 40 and bovine papilloma virus.

56. (New) A host cell comprising the vector of claim 48, wherein the cell is selected from the group consisting of a bacterial cell, a yeast cell, an insect cell, and a mammalian cell.

57. (New) The host cell of claim 50, wherein the vector is selected from the group consisting of a T7-based expression vector for expression in bacteria, a baculovirus-derived vector for expression in insect cells, and a pMSXND expression vector for expression in mammalian cells.

58. (New) Isolated mRNA complementary to the DNA of claim 47.

59. (New) An antisense oligonucleotide complementary to the mRNA of claim 58.

60. (New) An isolated host cell comprising nucleic acid of claim 43, wherein the nucleic acid is operatively associated with a regulatory sequence that controls gene expression.

61. (New) The isolated host cell of claim 60, wherein the regulatory sequence is a promoter.

62. (New) The isolated host cell of claim 61, wherein the promoter is selected from the group consisting of T7, metallothionein I, and polyhedrin promoters.—

63. (New) An isolated nucleic acid molecule comprising a nucleic acid selected from the group consisting of

- (a) a nucleotide sequence consisting of substantially the same nucleotide sequence of SEQ ID NO: 2; and
- (b) a nucleotide sequence consisting of substantially the same nucleotide sequence of SEQ ID NO: 3;

that encodes a polypeptide that binds transferrin when the nucleotide is transfected into a cell that lacks transferrin receptors and the cell is incubated with 5 µg/ml of transferrin in nutrient media for 30 min on ice.

64. (New) The isolated nucleic acid molecule of claim 63, wherein the nucleic acid is (a).

65. (New) The isolated nucleic acid molecule of claim 63, wherein the nucleic acid is (b).

66. (New) The isolated nucleic acid molecule of claim 63, wherein the nucleic acid molecule comprises a molecule selected from the group consisting of DNA, cDNA, and RNA.

67. (New) A recombinant expression vector comprising DNA of claim 66.

68. (New) A host cell comprising the vector of claim 67, wherein the cell is selected from the group consisting of a procaryotic cell and a eucaryotic cell.

69. (New) The vector of claim 67, wherein the vector is selected from the group consisting of a plasmid and a virus.

70. (New) Isolated mRNA complementary to the DNA of claim 66.

71. (New) An antisense oligonucleotide complementary to the mRNA of claim 70.